

St. Paul Island, Alaska
Request for No Further Action
Lake Hill Scoria Pit
TPA Site No. 15b

Site: Lake Hill Scoria Pit, Two-Party Agreement (TPA) Site Number 15b, a Subsite of TPA Site No. 15, Scoria Pits. TPA Site No. 15 consists of Telegraph Hill, Lake Hill, and Ridge Wall Scoria Pits.

Location: St. Paul Island, Alaska, approximately 800 miles southwest of Anchorage in the Bering Sea. TPA Site No. 15b is located within Tract B, U.S. Survey 4943, Township 35 South, Range 131 West of the Seward Meridian, Alaska (BLM 1986). It is within the Lake Hill Complex of four volcanic craters. It is within the eastern portion of St. Paul Island, approximately ¾ mile west of the road graded north from the airport, approximately 5.3 miles north-northeast of the City of St. Paul, approximately 1.32 miles to the nearest drinking water well in the City well field, and in the general vicinity of:

Latitude	57 ⁰ 10' 33.18"N	
Longitude	170 ⁰ 14' 42.21"W	(Figure 1)

Type of Release: Abandoned heavy equipment, quarry equipment, empty steel drums, metal and wood debris.

History:

In 1941, there was no development at the Lake Hill Complex, nor any roads to or through this complex. In 1941, not even an airfield existed on St. Paul Island (**Figure 2**). Prior to World War II (WWII), marine transportation was the sole means of logistical support and personnel transport for the Pribilof Islands.

In 1942, and in response to the invasion and occupation of Aleutian Islands by Japanese Imperial Forces, Pribilovians were evacuated to internment camps in southeast Alaska. U.S. Army, U.S. Navy and U.S. Coast Guard units and personnel were deployed to the Pribilof Islands for defensive occupation of both St. George and St. Paul Islands. By 1943, the U.S. Army had planned and constructed a series of facilities on the island. These facilities included construction of roads to and through the Lake Hill Complex, development of storage, bivouac and war fighting facilities (**Figure 3**). A WWII U.S. Army encampment was located in and around the Lake Hill Complex, including the present quarry, or scoria pit. Following WWII and until the mid-1950s, the U.S. Army and Alaska Territorial Guard used the site.

By Summer 1948, this WWII U.S. Army encampment was deteriorating. Aerial photographs show the location of the scoria pit, as well as debris and numerous abandoned fortified positions, facilities and excavations (**Figures 4 and 5**).

After WWII, the scoria pit continued to be used as a source of scoria aggregate or gravel. To what extent, it is currently unknown. In December 1976, as the Department of Commerce began the process of conveying management and ownership of island properties under the Fur Seal Act of 1966 and the Alaska Native Settlement Claims Act, the Lake Hill Borrow (Scoria) Pit was

St. Paul Island, Alaska
Request for No Further Action
Lake Hill Scoria Pit
TPA Site No. 15b

designated a “Joint Use Area”. It was to be retained by NMFS subject to joint management, under which the Tanadgusix Corporation (TDX) was allowed to use scoria from the pit free of charge, as long as the pit was under NMFS control, subject to priority use by NMFS (MOU. 1976). On January 19, 1979, the Bureau of Land Management ((BLM) patented surface property rights to TDX and the subsurface property rights to The Aleut Corporation (BLM 50-79-0049 1979 and BLM 50-79-0050 1979).

Circa 1983, airfield upgrades to support the Exxon Petroleum Offshore Survey Support (POSS) camp were completed. Scoria was required for the facilities construction.

In October 1983, the Alaska Department of Environmental Conservation (ADEC) conducted a field visit and literature research of the Community and Island of St. Paul. Neither the field visit, nor the subsequent field and project report addressed the Lake Hill Complex, including the U.S. Army encampment, or the Lake Hill Scoria Pit (ADEC 1984).

Circa 1983, the ADEC obtained photographs of two cranes, two pieces of quarry equipment with conveyors (rock stockpiling equipment), empty drums and miscellaneous wood and metal debris. This was located at the area within the Lake Hill Complex, which would later be designated as TPA Site No. 15b, Lake Hill Scoria Pit. (ADEC, *Circa* 1983). NOAA presumes these photographs acquired from ADEC’s files in Anchorage were taken during the 1983 Harmon site survey (ADEC 1984). The equipment and debris is visible in aerial photographs taken in 1993 (**Figures 6 and 7**), as well as the ca. 1983 photographs (**Figures 8 thru 11**).

Circa 1984, the Federal Aviation Administration (FAA) installed radome(s) with diesel generators and associated fuel tanks atop Lake Hill. Reportedly, the installation occurred after the downing of Korean Airlines Flight 007 over Sakahlin Island by the Soviet Air Force on September 1, 1983. The FAA radar was to provide coverage over eastern Siberia, Korea and northern China to ensure guidance of commercial aircraft away from potentially dangerous airspace. FAA does not have a license on file to use this land from NOAA, nor has a real estate property transaction occurred transferring this land to the Department of Transportation from the Department of Commerce. Property rights had previously been patented to TDX, surface, and TAC, subsurface.

In 1985, the U.S. Army Corps of Engineers (USACE) had a project on St. George and St. Paul Islands for debris cleanup and site restoration under the Defense Environmental Restoration Account (DERA) program. This USACE-administered DERA program would later transition into the Department of Defense Formerly Used Defense Sites (DOD FUDS) program. The Alaska District, USACE contracted Chase Construction, Inc. (Chase) of Anchorage, Alaska, to complete this project work for the Alaska District, under Contract No. DACA85-86-C-0003. On St. Paul Island, Chase subcontracted the Tanadgusix Corporation to perform the field work. The Alaska District awarded the contract to Chase on November 06, 1985, with field work being completed during 1986. The project work was accepted by the Alaska District on July 10, 1986, and given a satisfactory performance evaluation on August 26, 1987. On St. Paul Island, the contract identified 10 sites for the removal of miscellaneous wood and metal debris, and 55

St. Paul Island, Alaska
Request for No Further Action
Lake Hill Scoria Pit
TPA Site No. 15b

gallon drum dumps, followed by appropriate site restoration and revegetation. The Lake Hill Complex was designated by USACE as Site B-3, and originally described as “Wooden Structure Near Lake Hill: St. Paul Island A single wooden structure, approximately 16 ft X 20 ft.” The DOD, or its predecessor agencies, initially developed all of these sites during WWII (USACE 1991).

While Chase did not identify the Lake Hill site in its *Quality Control Program* written in 1985, in anticipation of its debris cleanup (Chase 1985), a review of Chase’s “Daily Quality Control Inspection Report[s]” revealed that USACE representatives on May 20, 1986, “located [sic] a lot more old wood bldgs. that appeared to be DOD. Also some old barrels.” A May 23, 1986 report stated, “Investigated surrounding area of site B-3 (Lake Hill). . . There are approx. 35-40 bunkers most of which contain debris plus barrels and other DOD debris in area.” On June 17, 1986, Chase reported, “Completed cleanup of debris from sites. . .B-3 and hauled debris to disposal site.” On the following day, Chase reported, “New barrel dump and bunker debris on change order. Performed preparatory inspection on new barrel site on 5/28 and on bunkers 6/20 as extra work. Those were not recorded under Inspections performed.” Finally on June 20, 1986, Chase reported, “ Completed sites. . .B3,. . .new barrel site, and bunkers.” As a subcontractor to Chase, TDX submitted a letter to Chase in 1986 stating, “Old bunkers in Lake Hill area and area North of airport. Any structures still standing in these bunkers have been laid flat and all spikes, metal debris and concrete foundations have been removed to the disposal site. Also, any old barrels in the area have been disposed of. The wood will be allowed to remain in the bunkers as it poses no health or safety hazard.” (TDX 1986)

In 1991, ADEC personnel conducted a site visit and preliminary assessment (PA) of nine sites on St. Paul Island, during the period July 30 – August 1. These sites were previously listed by DOD under DERA, as being suspected of past uncontrolled hazardous substance disposal. Neither the site visit, nor the subsequent PA report addressed the Lake Hill Complex U.S. Army encampment, nor the Lake Hill Scoria Pit (ADEC 1991 and ADEC 1992).

Circa 1992 – 1993, the Alaska Department of Transportation and Public Facilities completed upgrades and expansion of the St. Paul Airfield. Site survey was initiated in 1989 and the project design was completed between August 23, 1990, and August 13, 1992. The project completion final “As-Built” drawings were signed on January 28, 1994. Scoria aggregate was required to support this project. (ADNR 1989 and ADOT&PF. 1994).

In October 1992, two Ecology And Environment, Inc (E&E) representatives and one U.S. Army Corps of Engineers, Alaska District representative conducted a site visit to St. George and St. Paul Islands. The Lake Hill Complex, Lake Hill Scoria Pit, as well as the future TPA 15b site were visited, photographed and documented. The subsequent PA report it states, “Residents claim that NOAA abandoned heavy equipment at the scoria pits on Lake Hill and Telegraph Hill (see figures 4-2 and 4-5; E&E 1992).”

The PA also states, “Two power shovels, rock stockpiling equipment, and drums remain on the northeast side of the scoria pit at Lake Hill (see Appendix B, photographs 30 and 31). One

St. Paul Island, Alaska
Request for No Further Action
Lake Hill Scoria Pit
TPA Site No. 15b

power shovel is buried with the shovel portion remaining aboveground. The other shovel is fully exposed. No oil is evident in the crankcase at the time of the site visit. Thirteen rusted, empty drums are located approximately 30 feet south of the exposed power shovel and adjacent to the rock stockpiling equipment (E&E 1992).”

Photographs 30 and 31 (E&E 1993), document the same abandoned items and debris photographed *circa* 1983 (Figures 8 thru 12), and in 1993 aerial photographs (Figures 6 and 7). Within the PA, exposure pathways of concern are discussed for the three scoria pits, Lake Hill, Ridge Wall and Telegraph Hill Scoria Pits. However, there is no discussion or indication of any contaminant releases or contaminated soil at the area, which will become TPA Site No. 15b, Lake Hill Scoria Pit. This PA provides the basis for the negotiated designation of TPA Site No. 15, Scoria Pits (E&E 1993).

In 1994, real estate discussions about the future and potential transfer of the U.S. Survey 4943, Tract B, including the Lake Hill Scoria Pit and TPA Site No. 15b, took place between BLM, NOAA, TDx and The Aleut Corporation (TAC). NOAA NMFS had ceased any activities within the Lake Hill Complex by the time of the island’s administration and management transfer from the United States Government to local entities in 1983. Nevertheless, the 1994 participants realized that the ongoing quarry operations by island entities had extended the breadth and girth of the scoria pit. Its southern boundaries had grown to extend south of Tract B. BLM had to consider the survey and new legal description to include the “Borrow Pit 5.9 AC Total” within a redesignated parcel not to exceed 15 Acres (BLM 1994).

On January 26, 1996, the Two Party Agreement is signed by all parties, NOAA and the State of Alaska (NOAA 1996). The Lake Hill Scoria Pit site is included in the St. Paul Island TPA Site No. 15, Scoria Pits, designated as an Operating Unit 6 site for petroleum/hazardous substances contamination. Within the site background, it says “Drums and heavy equipment abandoned at two scoria pits (Lake Hill and Telegraph Hill). Within activities or status to date, it says “All unburied drums on Lake and Ridgewall Hill were bulked, sampled, and disposed.” However, only the 1985, U.S. Army Corps of Engineers (USACE) Defense Environmental Restoration Account (DERA), or formerly used defense site (FUDS) project removed drums from the Lake Hill Complex. Based upon the *circa* 1983 photographs, 1992 photographs, 1993 aerial photographs, drums were not removed from the scoria pit site by the USACE DERA contractor. NOAA had not removed any drums from this site, when the TPA was signed. Within the TPA heading of “remaining activities”, NOAA was to: “1. Remove machinery hulks/debris/empty drums and take confirmation samples. 2. NOAA to submit letter report with sample results for the site closure.”

It should be noted that at the time of signing, NOAA’s position was, and still is that this site has a “B Status”. This means that NOAA has not acknowledged definite responsibility for this site, believing the U.S. Department of Defense FUDS program still retains responsibility. Based upon visible weathering and corrosion, the drums, equipment and debris shown in the *circa* 1983 photographs and described in the 1992 PA, had been on the site for years. With transfer of Island administration and management duties in 1983, and patenting of the property rights in

St. Paul Island, Alaska
Request for No Further Action
Lake Hill Scoria Pit
TPA Site No. 15b

1979, NOAA had not been active at Lake Hill since at least prior to 1979. Since Chase did not identify this area in their 1986 documentation, it is unknown whether DOD, NOAA, or both generated this site within the Lake Hill Complex. It is known that the bulk of all cleanup was caused by DOD within the Lake Hill Complex, and DOD had acknowledged the Lake Hill Complex as a DOD FUDS site.

In 1996, NOAA awarded a cooperative agreement (CA), Award No. NA77AB0013, to a joint venture of Bering Sea Eccotech, Inc. (BSE) and Bristol Environmental Services Corporation (BESC), known as Aleutian Enterprises. BSE is a subsidiary of the TDX. TDX was the subcontractor to Chase Construction, which removed the debris from the Lake Hill Complex, under contract to the U.S. Army Corps of Engineers (USACE), Alaska District, in 1986. As part of the NOAA CA project work, BSE was to remove all abandoned equipment, drums and debris at TPA Site 15b, and conduct confirmation sampling.

In January 1997, BESC conducted a site visit to TPA Site No. 15b, observed and photographed the equipment and debris described by E&E in 1993 (Aleutian Enterprises 1997). After July 13, 1997, and during the summer of 1997, BSE cleared the site. In the project close-out report, BSE stated: “The majority of the debris at this site consisted of old, rock screening and excavation equipment, some of which was partially buried. All of the debris was collected, cut up, and transported to the staging area. No contaminated soils found at this site.” As part of this same CA, the debris at the staging area was later shipped off-island to Seattle by barge for recycling, or final disposal. Because BSE did not find any apparent contaminated soils at this site, no confirmation samples were taken (Aleutian Enterprises 1998).

On August 23, 1999, David B. Winandy, NOAA Pribilof Project Office conducted a site visit, inspecting and photographing the site, the scoria pit and the Lake Hill Complex. The TPA Site No. 15b had been cleaned (**Figures 12 thru 16**). There was no apparent contamination, via visual and olfactory observation. The larger scoria pit was an active quarry, although no quarrying activities were occurring on the day of the site visit. Additional scoria excavation had been occurring as evidenced by the increased depth & breadth of the quarry, as well as by the tracked equipment and wheeled vehicle tracks inside and around the quarry.

In September 1999, NOAA tasked Tetra Tech EM Inc. (TTEMI) to provide independent verification. TTEMI conducted fieldwork at TPA Site No. 15b, under the approved closure confirmation sampling plan (TTEMI 2000). TTEMI reported, “This scoria pit is an active gravel quarry. TTEMI observed no visual evidence of buried or partially buried drums, stained soil, or potentially contaminated soil at the site. TTEMI did not observe any evidence of the debris noted by E&E during the preliminary assessment (E&E 1993) and later removed from the site by Aleutian Enterprises (1997). No environmental samples were collected.”

TTEMI recommended, “Based upon field observations conducted during the 1999 field effort, the three scoria pits are all active quarries. No visual evidence of the debris noted at the Lake Hill and Ridge Wall Scoria Pits during previous investigations was noted during the 1999 field effort. In addition, Tetra Tech observed no evidence of stressed vegetation, stained soil, or odors

St. Paul Island, Alaska
Request for No Further Action
Lake Hill Scoria Pit
TPA Site No. 15b

at either site. Because historical removal activities have occurred at these sites, and because the previous and current investigations have not identified any signs of releases from these two sites, Tetra Tech recommends no further action at the Ridge Wall and Lake Hill Scoria Pits.”

In 2001, NOAA PPO procured IKONOS satellite imagery of St. Paul Island. In 2002, the digital elevation model (DEM) of the island was completed using this IKONOS imagery. In 2003, the IKONOS imagery was processed. The imagery shows that the TPA 15b debris including, equipment and drums visible in the 1993 aerial photographs had been removed from the site. In comparison between the 1993 and 2001 aerial imagery, additional excavation had occurred within the scoria pit. In 2001, the rim of the scoria pit was at approximately 45 meters (147.6 feet) above mean sea level (MSL), the bottom of the pit was at approximately 36 meters (118.1 feet) above MSL, the water surface of the perched aquifer in the adjacent crater lake was at approximately 34 meters (111.5 feet) above MSL, the depth of the scoria pit was approximately 9 meters (29-1/2 feet), and covered an area of 20,415 square meters (5.045 acres) (NOAA 2002).

Summary of Site Investigations:

ADEC obtained photographs of the site *circa* 1983, documenting abandoned equipment, drums and debris at what was to become the TPA 15b site. USACE and Chase Construction documented drums and debris in the inclusive Lake Hill Complex, St. Paul Island DERA Site B-3, but did not document anything at the TPA 15b site. E&E conducted a preliminary assessment of the site in 1992, six years after the DOD cleanup. E&E documented and photographed two power shovels, rock-stockpiling equipment, and thirteen rusted empty drums on the northeast side of the Lake Hill Scoria Pit. One of the power shovels was partially buried and one was partially exposed. No oil was evident in the crankcase at the time of the 1992 site visit.

Summary of Clean up Actions:

In 1997, Aleutian Enterprises, BSE & BESC, removed all debris from the Lake Hill scoria pit and shipped it off island for disposal. No confirmation samples were taken at that time, as no contaminated soil could be located. In 1999, NOAA PPO inspected and photographed the site. No visual or olfactory evidence of contaminate soil could be found. The site had been extensively excavated. In 1999, TTEMI also observed no visual evidence of buried or partially buried drums, stained soil, or potentially contaminated soil at the site.

In 2001, the scoria pit encompassed 5.045 acres and was approximately 29-1/2 feet deep. Depth to groundwater at the bottom of the pit is an estimated 116 feet. No known documentation or observations provide any indication that the Lake Hill scoria pit site was anything other than a debris site. The site is an active quarry with extensive excavations both horizontally and vertically. No signs of past activities including debris, stained soils, stressed vegetation, or petroleum odors related to NOAA, DOD or their predecessor agencies are evident at this site.

St. Paul Island, Alaska
Request for No Further Action
Lake Hill Scoria Pit
TPA Site No. 15b

Recommended Action:

Waiver the TPA requirement for confirmation sampling at the site, as there is no identifiable area to sample. In accordance with the waiver and paragraph 59 of the Two-Party Agreement (NOAA 1996), NOAA submits written confirmation that all corrective action has been completed and that no further action is required at TPA Site Number 15b, Lake Hill Scoria Pit.

References:

ADEC. Circa 1983. *Photographs of Abandoned Quarry Equipment, "Bay City" Cranes, Empty Steel Drums and Miscellaneous Debris, Lake Hill Scoria Pit, Circa 1983*, Pribilof Islands Collection, Alaska Department of Environmental Conservation, Anchorage, AK, Jennifer Donnell Solid Waste Management Division, 2002.

ADEC. 1984. *Field And Project Report, Waste Disposal, St. Paul Island, Conducted October 1 Through 8, 1983*, Carl H. Harmon, File No. 10-1-1983, March 21, 1984, State of Alaska, Department of Environmental Conservation, Southcentral Region.

ADEC. 1991. *Preliminary Assessment Report For St. Paul Island, Pribilof Islands, Alaska*, December 1991, Alaska Department of Environmental Conservation, Juneau, Alaska.

ADEC. 1992. Letter to Corps Of Engineers (Attn: Richard Parrish) from Svend Brandt-Erichsen, ADEC Regional Administrator. January 24, 1992.

ADNR. 1989. *Alaska Land Survey No. 89-101, Platting the St. Paul Airport, May 25 – June 03, 1989, R&M Consultants, Inc.*, Alaska Department of Natural Resources, Division of Land & Water Management, Anchorage, Alaska, August 01, 1989.

ADOT&PF. 1994. *St. Paul Island Airport, As-Built Drawings*, January 28, 1994, State of Alaska, Department of Transportation and Public Facilities.

AeroMap US. 1993. *Aerial Photographs of St. Paul Island*, Summer 1993, AeroMap US, Anchorage, Alaska.

Aleutian Enterprises. 1997. *Final Workplan For Debris And Underground Storage Tank Removals, St. Paul Island, Pribilof Islands, Alaska, Volume I*, May 1997, NOAA Award No. NA77AB0013, BSE Project No. 7029FG-00, Aleutian Enterprises, Anchorage, for National Oceanic and Atmospheric Administration, Seattle.

Aleutian Enterprises. 1998. *Project Close-Out Report, NOAA Debris Cleanup, St. Paul Island, Alaska, 1997, November 1998*, NOAA Award No. NA77AB0013, BSE Project No. 7029FG-00, Aleutian Enterprises, Bering Sea Eccotech / Bristol Environmental JV, Anchorage, for National

St. Paul Island, Alaska
Request for No Further Action
Lake Hill Scoria Pit
TPA Site No. 15b

Oceanic and Atmospheric Administration, Seattle. (Note final report submitted by awardee to NOAA in November 1998, but bears the date of the draft submitted in February 1998.)

BLM 50-79-0049. 1979. *Land Patent Entitlement For the Surface Estate Pursuant to ANSCA, AA-6697-A, to the Tanadgusix Corporation, 462.28 Acres, St. Paul Island, Pribilof Islands, Alaska*, Patent No. 50-79-0049, Bureau of Land Management, Anchorage, Alaska.

BLM 50-79-0050. 1979. *Land Patent Entitlement For the Subsurface Estate Pursuant to ANSCA, AA-6697-A, to the Aleut Corporation, 462.28 Acres, St. Paul Island, Pribilof Islands, Alaska*, Patent No. 50-79-0050, Bureau of Land Management, Anchorage, Alaska.

BLM. 1986. *Master Tile Plat (MTP), Surveyed Township 35 South, Range 131 West of the Seward Meridian, Alaska, Group No. 417 4/1/1986, Status of Public Domain, Land And Mineral Titles, Current to F&WS*, dated Mar 10 1989

BLM. 1994. *Telefax, Lake Hills Borrow Pit, with Survey Drawing & Description, April 27, 1994*, U.S. Department of the Interior, Bureau of Land Management, Alaska State Office, Division of Cadastral Survey, Anchorage.

Chase. 1985. *Quality Control Program For Contract DACA85-86-C-0003; Debris Cleanup & Site Restoration Environmental Restoration Account, St. Paul Island, St. George Island, Alaska*. November 1985.

E&E. 1993. *Final Report, Preliminary Assessment of National Oceanic And Atmospheric Administration Sites, Pribilof Islands, Alaska, Contract No. DACA85-91-D-0003, Delivery Order No. 0027*, February 1993, Ecology and Environment, Inc., Anchorage, for National Oceanic and Atmospheric Administration, Seattle, thru U.S. Army Corps of Engineers, Alaska District, Anchorage.

IKONOS. 2001. *IKONOS Satellite Imagery of St. Paul Island, Alaska*, NOAA Pribilof Project Office, Seattle, 2002.

MOU. 1976. *Memorandum of Understanding among Tanadgusix Corporation, St. Paul Island, Alaska, and Tanaq Corporation, St. George Island, Alaska, and United States Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service, regarding Pribilof Islands Land Selections*, December 22, 1976.

NOAA. 1996. *Pribilof Islands Environmental Restoration Two Party Agreement*. Attorney General's Office File No. 66 1-95-0126, National Oceanic and Atmospheric Administration. January 26, 1996.

NOAA. 1999. *Site Visit Photographs, TPA Site No. 15b, Lake Hill Scoria Pit, David B. Winandy, August 23, 1999*, NOAA Pribilof Project Office, Seattle.

St. Paul Island, Alaska
Request for No Further Action
Lake Hill Scoria Pit
TPA Site No. 15b

NOAA. 2002. *Digital Elevation Model (DEM), St. Paul Island, Alaska*, NOAA Pribilof Project Office (NOAA PPO), Seattle, 2002.

Scheffer. 1948. *Aerial Photographs, Victor B. Scheffer, Biologist, 1948, U.S. Department of the Interior, U.S. Fish & Wildlife Service*, National Marine Mammal Laboratory Library Collection, Alaska Fisheries Science Center, National Marine Fisheries Service, National Oceanic and Atmospheric Administration, Western Regional Center, Seattle.

TDX. 1986. Letter from Gregory Fratis, Sr., and Anthony Philemonoff, TDX Corporation, to Chase Construction, Inc., June 18, 1986, Subject: *Questionable Material Which Will Not Be Removed From St. Paul Island Per Contract DACA85-86-C-0003*.

TTEMI. 2000. *Final, Closure Confirmation Report, Telegraph Hill, Ridge Wall, And Lake Hill Scoria Pits, Two-Party Agreement Site No. 15, Pribilof Islands Site Restoration, St. Paul Island, Alaska*, December 18, 2000, Contract No. 50WCNA906018, Modification No. 56WCNA901077, Tetra Tech EM Inc., Seattle, for National Oceanic and Atmospheric Administration, Kansas City.

USF&WS. 1941. *Map, St. Paul Island, Alaska, Scale 1/40,000, Drawn by J.R. Stacy, 1941*, U.S. Department of the Interior, U.S. Fish & Wildlife Service.

U.S. Army Engineer. 1943. *Map, Project Location And General Layout, Airfield And Garrison Site, Sheet No. 1, St. Paul Island, Alaska, Scale 1:20,000, Feb 9, 1943*, U.S. Engineer Office, Anchorage, Alaska, War Department.

USACE. 1991. *Letter with attachments, Subject: Contract DACA85-86-C-0003, Debris Cleanup and Site Restoration, St. Paul and St. George Islands*, June 28, 1991, U.S. Army Corps of Engineers, Alaska District, Construction Operations Division, Anchorage.

**St. Paul Island, Alaska
Request for No Further Action
Lake Hill Scoria Pit
TPA Site No. 15b**

For the National Oceanic and Atmospheric Administration

John Lindsay
NOAA, Pribilof Project Office

Date

Approvals: In accordance with Paragraph 59 of the Two Party Agreement, this is to confirm that all corrective action has been completed at TPA Site Number 15b, Lake Hill Scoria Pit, in accordance with the Agreement and that no further action is required.

For the Alaska Department of Environmental Conservation

Louis Howard
Alaska Department of Environmental Conservation
Remedial Project Manager

Date